

# **Session 4: Transportation: Vehicles, Fuels and Infrastructure - Relevant Recommendations**

## **Vehicles:**

- Implement a series of measures designed to “green” the State owned fleet in order reduce the State fleet’s petroleum consumption and GHG emissions 25 percent by 2020
- Implement policies to promote the use of Zero Emission Vehicle (ZEV), such as:
  - Work with State legislature to expand the ZEV sales tax exemption;
  - Assess the feasibility and GHG impacts of changes to the uniform building code to require provisions for vehicle charging stations (both residential and at other parking areas); and
  - Develop a plan for statutory and regulatory actions to create incentives for alternative fuel infrastructure.
- Implement truck anti-idling policies, including: 1) increased enforcement, and 2) encouraging the expanded use of anti-idling strategies, such as auxiliary power and truck stop electrification.

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### **Fuels:**

- Develop an approach for implementing a regional Low Carbon Fuel Standard (LCFS).

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## **Infrastructure:**

- Implemented an aggressive “ecodriving” campaign aimed at improving vehicle operation and driving habits, which have been suggested could contribute a significant component of the mobile source GHG emissions.
- Explore fuel efficient vehicle incentive programs designed to encourage the use of low-carbon, more fuel efficient vehicles, such as fees and rebates proportional to GHG emissions (i.e., feebates), modifications to existing tolls and/or other mechanisms, and revisions to existing fees/surcharges, such as the State’s existing surcharge on new Luxury and fuel inefficient vehicles, and/or other mechanisms.

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### **Infrastructure (cont.):**

- Maintain existing mass transit infrastructure and expand system capacity
- Expand bus rapid transit routes.

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## **Infrastructure (cont.):**

- Implement various demonstration projects that will give the State the opportunity to determine the feasibility and acceptability of various transportation-related structural changes, before committing State resources, while providing an opportunity for the NJBPU to assess the expected infiltration of alternatively-fueled vehicles to the overall fleet, and the implication of that growing percentage on non-liquid fuel and electricity needs of the State. This demonstration projects include:
  - A proposed “Clean and Green Corridor” program of policies and projects to facilitate meeting the GWRA’s goal of reducing GHGs.
  - A program to demonstrate plug-in hybrid and/or dedicated electric vehicle capability for residential uses.
  - Demonstrations of various infrastructure needs to support alternative transportation fuels for fleet use.
  - A number of activities, such as the use of ZEVs/hybrid vehicles as station cars at pilot transit stations; expanded parking with battery recharge capability at various locations; and the use of alternative fueled or hybrid buses, along several New Jersey corridors to reduce GHGs and help move the State toward its 2020 GWRA goal
  - A “Cities in Green” project, to facilitate “green vehicle” infrastructure.

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## **Infrastructure (cont.):**

- Enhance commuter options and “green” commuting programs.
- Expand the use of Emergency Service Patrols in high-traffic corridors for the purpose of incident management, which has been shown to reduce non-recurring congestion.
- Expand the use of signal synchronization/optimization, an application that coordinates the timing of traffic signals to minimize delay, reduce congestion, and improve safety along high-traffic areas. The NJDOT will also work with New Jersey Transit to give buses priority treatment in congested corridors to improve bus operations.

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## **Infrastructure (cont.):**

- Assess the feasibility of implementing a value pricing strategy called high occupancy toll lanes to maximize the efficiency of underutilized high-occupancy vehicle lanes (i.e., a lane reserved for people who share the ride in buses, vanpools, or carpools).
- Investigate feasibility of using increased waterborne commerce (i.e., short sea shipping) as an alternative to truck and rail movements for some freight movements.
- Investigate opportunities for rail shuttle operations, which would use short-line railroads to move freight from Port Newark/Port Elizabeth to inland freight centers, where they could be processed through value-added operations, resorted, and sent out via truck or long-haul rail.

# **Session 4: Transportation: Vehicles, Fuels and Infrastructure - Focus Questions**

## **Vehicles:**

- What are the best ways to get medium-duty delivery-type trucks to begin converting to hybrid-electric or pure electric drive as is occurring in Europe (London package delivery trucks for example). These centrally rechargeable vehicles are very amenable to battery-electric propulsion. Should the State mandate the transition to hybrids and/or ZEVs for these fleets?
- What key criteria must be met before the average driver in New Jersey will purchase a ZEV, e.g., minimum range, cost, maximum speed, recharge time, battery replacement costs, etc?
- Would you use a vehicle powered by natural gas if you had a home refueling appliance and the vehicle had a 250 mile range? If not, what subsidies would be required for you to consider the switch?



# **Session 4: Transportation: Vehicles, Fuels and Infrastructure - Focus Questions**

## **Vehicles (cont.):**

- Is a new car feebate program based on vehicle emission levels a viable program for New Jersey? Should vehicles used for construction be exempt from the feebate program? Should other vehicles applications be exempt?
- Roughly what dollar amount of fee do you think will have an impact on consumers' decisions so that they will not purchase a fuel-inefficient vehicle and instead consider more fuel-efficient models? Likewise, what dollar level of rebate do you think will cause a significant number of consumers to choose a more fuel-efficient vehicle?

## **Session 4: Transportation: Vehicles, Fuels and Infrastructure - Focus Questions**

### **Fuels:**

- What factors need to be considered when developing and implementing a Low Carbon Fuel Standard?

## **Session 4: Transportation: Vehicles, Fuels and Infrastructure - Focus Questions**

### **Infrastructure:**

- Does this draft report create the appropriate transportation vision for the future? If not, what's missing?
- What specific actions are needed now to ensure the transportation vision outlined in the draft report?